



MoO₃/Ag/MoO₃ anode in organic photovoltaic cells: Influence of the presence of a CuI buffer layer between the anode and the electron donor

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Auteur	Makha, Mohammed [1], Cattin, Linda [2], Lare, Yendoubé [3], Barkat, I [4], Morsli, Mustapha [5], Addou, Mohammed [6], Khelil, A [7], Bernède, Jean Christian [8]
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Résumé en anglais	MoO ₃ /Ag/MoO ₃ (MAM) multilayer structures (layers thickness 20 nm/10nm/35 nm) are used as anode in CuPc/C ₆₀ /Alq ₃ /Al organic photovoltaic cells. The averaged transmittance (400 nm-800 nm) of these MoO ₃ /Ag/MoO ₃ multilayer structures is 70%62% and their sheet resistance is 3.5 61.0 X/sq. When these multilayer structures are used as anode, the power conversion efficiency of the MoO ₃ /Ag/MoO ₃ /CuPc/C ₆₀ /Alq ₃ /Al cells is around 1%, this efficiency is increased of 50% when a thin CuI film (3 nm) is introduced at the interface between the anode and the organic film. This improvement is attributed to the templating effect of CuI on the CuPc molecules
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